

WHAT IS CLAIMED IS:

1. A method for creating a single digital image file from multiple scans, the method comprising:

scanning a first side of a medium using a single imaging station having only one sensor unit to create first digital data corresponding to a source image on the medium;

5 scanning an opposite side of the medium using the single imaging station to create second digital data corresponding to the source image; and

combining the first and second digital data to create a single digital image which represents the source image.

2. The method as recited in claim 1, wherein the medium comprises developing film, the steps are conducted for a first film development time to create the single digital image, the steps are repeated for a second film development time to create a second digital image representing the same source image, and the single digital image and the second digital image are combined to form an enhanced digital image representing the source image.

3. The method as recited in claim 1, wherein the imaging station comprises a pair of radiation sources configured to apply radiation to opposite sides of the medium.

4. The method as recited in claim 1, further comprising:
flipping the medium between the scanning steps.

5. The method as recited in claim 4, wherein the flipping is conducted automatically.

6. The method as recited in claim 4, wherein the flipping is conducted by introducing a twist into the medium.

7. The method as recited in claim 1, wherein the medium comprises developing film, the sensor unit is configured to record radiation reflected from the film and radiation transmitted through the film, and the imaging station comprises a back source configured to apply radiation

to one side of the developing film and a front source configured to apply radiation to an opposite side of the developing film.

8. The method as recited in claim 1, further comprising:

aligning the first and second digital data.

9. A method for creating a digital image file from a developing film, comprising:

applying developer to film to cause the film to begin to develop;

moving the film relative to a scanning station having a single sensor unit during a first time period such that a front surface of the film faces the sensor unit;

during the first time period, applying radiation to a frame of the developing film;

sensing front radiation reflected from the frame during the first time period using the single sensor unit;

creating front digital data from the sensed front reflected radiation;

moving the film relative to the scanning station during a second time period such that a back surface of the film faces the single sensor unit, the back surface being opposite the front surface;

during the second time period, applying radiation to the frame;

sensing back radiation reflected from the frame during the second time period using the single sensor unit;

creating back digital data from the sensed back reflected radiation;

transmitting radiation through the frame;

sensing radiation transmitted through the film frame using the single sensor unit;

creating transmitted digital data from the sensed transmitted radiation; and

combining the front digital data, the back digital data, and the transmitted digital data to form a digital image file which represents the film frame.

10. The method as recited in claim 9, further comprising:

flipping the film.

11. The method as recited in claim 10, wherein the film is flipped by introducing a twist in the film and moving the twisted film.

12. The method as recited in claim 10, wherein the film is flipped manually.

13. The method as recited in claim 9, wherein the steps are conducted for a first film development time to create the digital image file, the steps are repeated for a second film development time to create a second digital image file, and the digital image file and the second digital image file are combined to form an enhanced digital image representing the frame.

14. The method as recited in claim 9, wherein the moving steps are conducted by moving the single sensor unit.

15. A digital film development system, comprising:

a source configured to apply radiation to a developing film strip;

a single sensor unit configured to sense radiation from the developing film strip;

and

a transportation system adapted to pass the developing film strip in front of the single sensor unit multiple times such that opposite sides of the developing film strip face the sensor during each pass.

16. The system as recited in claim 15, wherein the sensor unit is configured to provide multiple digital data files for each frame on the film, each digital data file for the frame being created during a separate pass.

17. The system as recited in claim 16, further comprising:

an image processor configured to combine the digital data for each frame.

18. The system as recited in claim 17, wherein the image processor is configured to align the digital data for each frame.

19. The system as recited in claim 15, wherein the source comprises a back source configured to apply radiation to the one side of the film and a front source configured to apply radiation to an opposing side of the film.